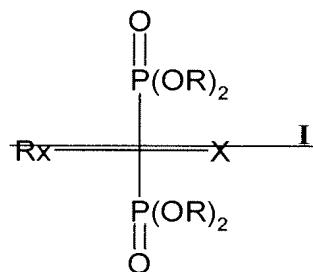


Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

Claim 1 (currently amended): A pharmaceutical preparation which comprises 2-(imidazol-1-yl)-1-hydroxyethane-1,1-diphosphonic acid or a pharmacologically acceptable salt thereof in combination with N-[2-cyano-4-(2,2-dimethyl-propylamino)-pyrimidin-5-ylmethyl]-4-(4-methyl-piperazin-1-yl)-benzamide or a pharmacologically acceptable salt thereof for simultaneous, sequential or separate use, a bisphosphonate of formula I, or a physiologically acceptable and cleavable ester or a salt thereof



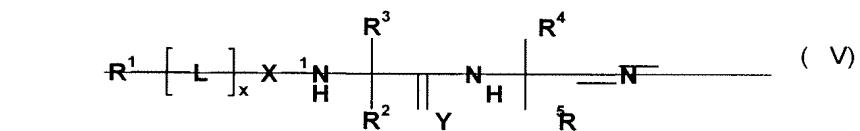
wherein

X is hydrogen, hydroxyl, amino, alkanoyl, or an amino group substituted by C₁-C₄alkyl, or alkanoyl;

R is hydrogen or C₁-C₄alkyl; and

Rx is a side chain which contains an optionally substituted amino group, or a nitrogen containing heterocycle (including aromatic nitrogen-containing heterocycles), or a pharmaceutically acceptable salt thereof or any hydrate thereof; and

a) a cat K inhibitor of formula V, or a physiologically acceptable and cleavable ester or a salt thereof



wherein R¹ is optionally substituted (aryl, aryl-lower alkyl-lower alkenyl-lower alkynyl, heterocycl or heterocycl-lower alkyl);

R² and R³ together represent lower alkylene optionally interrupted by O-S or NR⁶ so as to form a ring with the carbon atom to which they are attached and R⁶ is hydrogen-lower alkyl or aryl-lower alkyl;

R⁴ and R⁵ are independently H, or optionally substituted (lower alkyl or aryl-lower alkyl), C(O)OR⁷, or C(O)NR⁷R⁸, wherein R⁷ is optionally substituted (lower alkyl-aryl, aryl-lower

~~alkyl, cycloalkyl, bicycloalkyl, bicycloalkyl or heterocyclyl), and R⁸ is H, or optionally substituted (lower alkyl, aryl, aryl lower alkyl, cycloalkyl, bicycloalkyl, bicycloalkyl or heterocyclyl); or~~

~~R⁴ and R⁵ together represent lower alkylene, optionally interrupted by O, S or NR⁶, so as to form a ring with the carbon atom to which they are attached, and R⁶ is hydrogen, lower alkyl or aryl lower alkyl; or~~

~~R⁴ is H or optionally substituted lower alkyl and R⁵ is a substituent of formula X²-(Y¹)_n-(Ar)_p-Q-Z wherein~~

~~Y¹ is O, S, SO, SO₂, N(R⁶)SO₂, N-R⁶, SO₂NR⁶, CONR⁶ or NR⁶CO;~~

~~N is zero or one;~~

~~P is zero or one;~~

~~X² is lower alkylene; or when n is zero, X² is also C₂-C₇ alkylene interrupted by O, S, SO, SO₂, NR⁶, SO₂NR⁶, CONR⁶ or NR⁶CO, and R⁶ is hydrogen, lower alkyl or aryl lower alkyl; Ar is arylene;~~

~~Z is hydroxyl, acyloxy, carboxyl, esterified carboxyl, amidated carboxyl, aminosulfonyl, (lower alkyl or aryl lower alkyl)aminosulfonyl, or (lower alkyl or aryl lower alkyl)sulfonylaminocarbonyl; or Z is tetrazolyl, triazolyl or imidazolyl;~~

~~Q is a direct bond, lower alkylene, Y¹ lower alkylene or C₂-C₇ alkylene interrupted by Y¹;~~

~~X¹ is -C(O)-, -C(S)-, -S(O)-, -S(O)₂- or -P(O)(OR⁶)-, and R⁶ is as defined above;~~

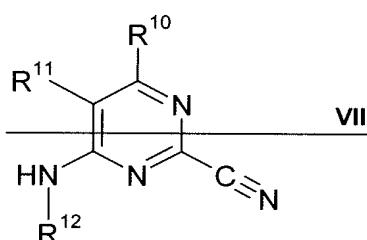
~~Y is oxygen or sulphur;~~

~~L is optionally substituted Het, Het-CH₂- or -CH₂-Het-, and Het is a hetero atom selected from O, N or S; and~~

~~X is zero or one; and~~

~~aryl in the above definitions represents carbocyclic or heterocyclic aryl; or alternatively~~

b) another class of cat K inhibitors of formula VII, or a physiologically acceptable and cleavable ester or a salt thereof



wherein

R¹⁰ is H, R¹⁴, OR¹⁴ or NR¹³R¹⁴,

wherein R¹³ is H, lower alkyl or C₃ to C₁₀ cycloalkyl, and

R¹⁴ is lower alkyl or C₃ to C₁₀ cycloalkyl, and

wherein R¹³ and R¹⁴ are independently, optionally substituted by halo, hydroxy, lower alkoxyl, CN, NO₂, or optionally mono- or di-lower alkyl substituted amino; R¹¹ is CO-NR¹⁵R¹⁶, NH-CO-R¹⁵, CH₂-NH-C(O)-R¹⁵, CO-R¹⁵, S(O)-R¹⁵, S(O)₂-R¹⁵, CH₂-CO-R¹⁵ or CH₂-N(R¹⁵)R¹⁶; wherein R¹⁵ is aryl, aryl-lower alkyl, C₃-C₁₀cycloalkyl, C₃-C₁₀cycloalkyl-lower alkyl, heterocyclyl or heterocyclyl-lower alkyl; R¹⁶ is H, aryl, aryl-lower alkyl, aryl-lower alkenyl, C₃-C₁₀cycloalkyl, C₃-C₁₀cycloalkyl-lower alkyl, heterocyclyl or heterocyclyl-lower alkyl, or wherein R¹⁵ and R¹⁶ together with the nitrogen atom to which they are attached are joined to form an N-heterocyclyl group; wherein N-heterocyclyl denotes a saturated, partially unsaturated or aromatic nitrogen containing heterocyclic moiety attached via a nitrogen atom thereof having from 3 to 8 ring atoms optionally containing a further 1, 2 or 3 heteroatoms selected from N, NR¹⁷, O, S, S(O) or S(O)₂ wherein R¹⁷ is H or optionally substituted (lower alkyl, carboxy, acyl (including both lower alkyl acyl, e.g. formyl, acetyl or propionyl, or aryl acyl, e.g. benzoyl), amide, aryl, S(O) or S(O)₂), and wherein the N-heterocyclyl is optionally fused in a bicyclic structure, e.g. with a benzene or pyridine ring, and wherein the N-heterocyclyl is optionally linked in a spiro structure with a 3 to 8 membered cycloalkyl or heterocyclic ring wherein the heterocyclic ring has from 3 to 10 ring members and contains from 1 to 3 heteroatoms selected from N, NR¹⁶, O, S, S(O) or S(O)₂ wherein R¹⁶ is as defined above), and wherein heterocyclyl denotes a ring having from 3 to 10 ring members and containing from 1 to 3 heteroatoms selected from N, NR¹⁷, O, S, S(O) or S(O)₂ wherein R¹⁷ is as defined above), and wherein R¹⁵ and R¹⁶ are independently, optionally substituted by one or more groups e.g. 1-3 groups, selected from halo, hydroxy, exo-lower alkoxyl, CN or NO₂, or optionally substituted (optionally mono- or di-lower alkyl substituted amino, lower alkoxyl, aryl-lower alkyl, N-heterocyclyl or N-heterocyclyl-lower alkyl (wherein the optional substitution comprises from 1 to 3 substituents selected from halo, hydroxy, lower alkoxyl, lower alkoxyl-lower alkyl, lower alkoxyl-carbonyl, CN, NO₂, N-heterocyclyl or N-heterocyclyl-lower alkyl, or optionally mono- or di-lower alkyl substituted amino); R¹² is independently H, or optionally substituted (lower alkyl, aryl, aryl-lower alkyl, C₃-C₁₀cycloalkyl, C₃-cycloalkyl-lower alkyl, heterocyclyl or heterocyclyl-lower alkyl) and wherein R² is optionally substituted by halo, hydroxy, exo-lower alkoxyl, CN, NO₂, or optionally mono- or di-lower alkyl substituted amino.

for simultaneous, sequential or separate use.

Claim 2 (previously presented): The pharmaceutical preparation according to claim 1; wherein its use is for the treatment of malignant diseases, bone metastasis, cancer cell growth, or/and cancer therapy-induced bone loss.

Claim 3 (previously presented): A method of treating a patient suffering from a malignant disease, bone metastasis, cancer cell growth, or/and cancer-therapy-induced bone loss comprising administering to the patient an effective amount of the pharmaceutical preparation according to claim 1.

Claim 4 (previously presented): A method of treating a patient suffering from a benign disease, bone loss disease, osteoporosis, osteoarthritis comprising administering to the patient an effective amount of the pharmaceutical preparation according to claim 1.

Claim 5 (previously presented): A pharmaceutical composition comprising zoledronic acid and a cathepsin K inhibitor for the inhibition of bone metastasis, cancer cell growth or/and inhibition of cancer-therapy-induced bone loss.

Claims 6-7 (canceled)